

REMARKS

Claims 1 to 4 are pending in the application, of which Claims 1 and 3 are independent. Reconsideration and further examination are respectfully requested.

Claims 1 to 4 were rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 5,566,277 (Hideshima et al.) in view of U.S. Patent No. 6,486,971 (Kawamoto). Applicant respectfully traverses this rejection.

The present invention, which is related to a FIFO-type memory, is characterized by memory control means for (a) starting writing of an image signal for a first light beam in a first memory before an image signal for a first light beam for a previous scanning is completely read out from the first memory and (b) starting writing of an image signal for a second light beam in a second memory after an image signal for a second light beam for a previous scanning is read out from the second memory. By virtue of these features, since multiple image signals by multiple beams can be controlled in the same manner as image signals generated by a single beam can be controlled, a low cost arrangement like that of an image signal apparatus can be attained.

Claim 1 recites an image forming apparatus comprising scanning means for scanning a photosensitive member with a first light beam and a second light beam, a first memory for storing an image signal for modulating the first light beam, a second memory for storing an image signal for modulating the second light beam, and memory control means. The memory control means starts writing an image signal for a first light beam in the first memory before an image signal for a first light beam for previous scanning is completely read out from the first memory, and starts writing an image signal for a second light beam in the second memory after an image signal for a second light beam for previous

scanning is read out from the second memory.

Hideshima et al., as understood by Applicant, relates to an image data processing method and apparatus to integrally store ruled line data and character data into a memory for storing images. However, Hideshima et al. is seen to refer to a group of memories consisting of a DRAM, not a FIFO memory. Therefore, the timing control of Hideshima et al. is performed based on use of DRAM, and not based on use of a FIFO. Indeed, the Office Action acknowledges that, "Hideshima et al. fails to teach the starting of write-in of the image data for the first beam in the first memory before the image data for the first light beam for previous scanning is read out from the first memory so as not to simultaneously execute the write-in of the image data for the first light beam and the write-in of the image data for the second light beam." Nothing in Hideshima et al. is seen to teach or suggest an image forming apparatus in which a memory control means starts writing an image signal for a first light beam in a first memory before an image signal for a first light beam for previous scanning is completely read out from the first memory, and starts writing an image signal for a second light beam in a second memory after an image signal for a second light beam for previous scanning is read out from the second memory, as recited in Claim 1.

Kawamoto refers to a digital copier for adjusting the size of an output image by slightly changing a magnification of a read image read simultaneously. In Kawamoto, the digital copier includes an image processing part 33 having a shading correction part 51, a filter processing part 52, a first magnification processing part 53a, a second magnification processing part 53b, a memory I/F 54, a γ conversion part 55, and an image processing part 56. Since the memory I/F 54 is arranged between the first magnification processing part

53a and the second magnification processing part 53b, image data output from the first magnification processing part 53a is processed in the second magnification processing part 53b.

It is respectfully submitted that even if Kawamoto be deemed to refer a FIFO memory, nothing has been found, or pointed out, in Kawamoto that would teach or suggest an image forming apparatus in which a memory control means starts writing an image signal for a first light beam in a first memory before an image signal for a first light beam for previous scanning is completely read out from the first memory, and starts writing an image signal for a second light beam in a second memory after an image signal for a second light beam for previous scanning is read out from the second memory, as recited in Claim 1. Kawamoto also is not seen to teach anything which would cure the above-noted deficiencies of Hideshima et al., as a reference against Claim 1 herein.

For all of the foregoing reasons, Claim 1 is believed to be clearly patentable over Hideshima et al. and Kawamoto, whether considered separately or in combination, and thus withdrawal of the rejection Claim 1 is respectfully requested.

Independent Claim 3 is a method claim corresponding to apparatus Claim 1, and also is believed to be clearly patentable over Hideshima et al. and Kawamoto, whether considered separately or in combination, for substantially the same reasons as those presented above with respect to Claim 1.

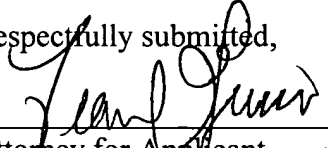
The other rejected claims remaining in this application depend from one or another of the independent claims discussed above and, therefore, are submitted to be patentable over the references relied on in the Office Action for at least the same reasons as are those respective independent claims. Since each dependent claim is also deemed to

define an additional aspect of the invention, however, individual reconsideration of the patentability of each claim on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.

Applicant's undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,



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